REMARKS

Claims 1-14 are pending in the application.

In Paragraph No. 3 of the Action, claims 1-10, 13 and 14 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Nishiyama et al (US 6,537,718 B2).

The Examiner's characterization of Nishiyama et al and her reasoning in support of the rejection are set forth at pages 2-5 of the Action. It is noted that the Examiner in the present Action has revised her explanation of the rejection, including citations to different portions of the disclosure of Nishiyama et al.

Applicants submit that the rejection should be withdrawn because Nishiyama et al '718 does not disclose or render obvious the positive resist composition of the present invention.

As recited in independent claim 1, the present invention relates to a positive resist composition. The resist composition includes (a) a resin, and (b) a compound that generates an acid upon irradiation with actinic rays or radiation.

As stated in claim 1, the resin (a) is decomposed by the action of an acid to increase its solubility in an alkali developing solution. The resin contains a structural unit having a group represented by formula (X) shown in claim 1, and has a weight average molecular weight of not more than 5,000. In addition, the resin contains an acid decomposable group in an amount of not more than 40% based on the sum total of the number of acid decomposable groups and the number of alkali-soluble groups not protected with acid decomposable groups.

In the Remarks accompanying the Amendment filed August 29, 2005, Applicants explained why Nishiyama et al does not disclose or render obvious the positive resist composition of the present invention.

At page 7 of the Remarks, Applicants pointed out that while certain of the repeating units in certain of the formulas in Nishiyama et al would satisfy the limitations of formula (X) in present claim 1, none of the resins of Nishiyama et al cited in the previous Office Action (that is, the resins of formulas (IV-35), (IV-36), (IV-37) and (IV-43)) were employed in the working Examples of Nishiyama et al.

In the present Action, the Examiner relies upon different resins of Nishiyama et al, namely, resins (IV-22) and (IV-24) of Nishiyama et al. Applicants note that neither of these resins are employed in the working Examples of Nishiyama et al '718.

As an additional distinction over Nishiyama et al, Applicants noted that the Examiner did not directly address the recitation in present claim 1 that the resin must have a weight average molecular weight of not more than 5,000, except to say that the molecular weight of the taught resin in Nishiyama et al prefereably is in the range of 2,000 to 300,000, citing column 38, lines 1-17 of Nishiyama et al. See the paragraph bridging pages 7-8 of the Remarks accompanying the Amendment filed August 29, 2005.

The Examiner addresses this issue at page 4 of the present Action. She asserts that "Since the data point of 2,000 is clearly disclosed at the lower end of the taught range, one skilled in the art would immediately envisage Nishiyama's resin (B) to have the Mw of 2,000 (thus the prior art teaches present limitations as to the wt average molecular weight being not more than 5,000)."

Applicants respectfully disagree with and rebut the Examiner's contention as follows.

There is no reason why a person skilled in the art would "immediately envisage" Nishiyama's resin (B) as having an Mw of 2,000 merely because that is the lower end point of Nishiyama's very broad range of 2,000 to 300,000. It could equally well be said that a person of ordinary skill in the art would "immediately envisage" Nishiyama's resin as having an Mw of 2,000 or 300,000 or any number in between those values, which is exactly the point: there is nothing in Nishiyama et al which discloses or suggests the quite narrow range of 5,000 or less called for in the present claims. It is well established that a broad range does not necessarily anticipate or render obvious a narrow range, just as a broad genus does not necessarily anticipate a narrow subgenus. Nishiyama et al does not render obvious, let alone anticipate, the quite narrow range of 5,000 or less called for in the present claims. Further, if a person of ordinary skill in the art were to seek some guidance as to what weight average molecular weights for Nishiyama's resin (B) might actually be employed in practice, that person might look to the working Examples of Nishiyama et al. The weight average molecular weights of the resins R-1 through R-4 in Synthesis Examples 1 and 2 at columns 43 and 44 of Nishiyama et al are 12,000, 12,000, 9,800 and 17,000, respectively, all of which are well outside the range of 5,000 or less called for in the present claims. These resins were used in synthesizing resins B-1, B-2, etc. in the Synthesis Examples beginning with Synthesis Example 3 of Nishiyama et al at column 44 thereof. Since the base resins have weight average molecular weights in excess of 5,000, the synthesized resins made from these base resins would also have weight average molecular weights in excess of 5,000. Accordingly, the resins B-1, B-2, etc. of Nishiyama et al would have weight average molecular weights well in excess of 5,000.

Still further, if a person of ordinary skill in the art were to contemplate Nishiyama's broad range of 2,000 to 300,000 without reference to the Examples of Nishiyama et al, that person, it appears to Applicants, would be more likely to employ a resin having a molecular weight in the midpoint of that range, rather than a resin having a molecular weight at one or the other endpoints of that range.

For all of these reasons, Nishiyama et al does not render obvious, let alone disclose or lead one skilled in the art to "immediately envisage" the presently recited range of 5,000 or less.

Next, Applicants argued that the Examiner did not directly address the recitation of present claim 1 that the resin must contain an acid decomposable group in an amount of not more than 40% based on the sum total of the number of acid decomposable groups and the number of alkali-soluble groups not protected with an acid decomposable group. See page 8 of the Remarks accompanying the Amendment of August 29, 2005.

The Examiner addresses this issue in the sentence bridging pages 4-5 of the present Action. She states that Nishiyama teaches (column 24, lines 61-65) that the molar ratio of the repeating unit of the formula (IV) to the repeating unit of the formula (V) present in his resin is *more preferably* from *10*/90 to *40*/60. Thus, the Examiner reasons, Nishiyama teaches the present limitation as to the amount of the acid decomposable group being not more than 40%.

In this regard, Applicants submit that the present invention achieves particularly specific effects by selecting a specific molecular weight and a specific ratio of acid decomposable groups, and thus the present invention which specifies (1) polymer, (2) molecular weight, and (3)

ratio of an acid decomposable group is not taught at all by the general description regarding the ratio of the acid decomposable group as disclosed in Nishiyama et al.

As explained in the Amendment filed August 29, 2005, the claims of the present application define both the weight average molecular weight and the "protection" rate in specific ranges, so that the positive resist composition of the present invention provides or generates specific effects in terms of improvements in *in vacuo* PED in cases of drawing with an electron beam. Nishiyama et al. '718 does not disclose, fore shadow or suggest these improvements, nor does Nishiyama et al. disclose or fairly suggest the specific positive resist composition of the present invention. Applicants respectfully submit that the positive resin composition of the present invention is novel and patentable over Nishiyama et al. '718.

For these reasons, Applicants submit that the section 102(b) rejection of claims 1-10 and 13-14 based on Nishiyama et al '718 should be reconsidered and withdrawn.

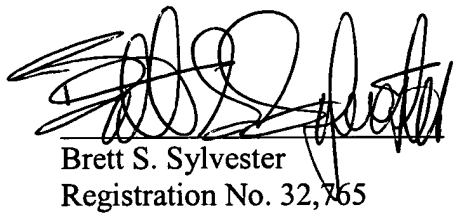
In Paragraph No. 4 of the Action, claims 11 and 12 are objected to as being dependent upon a rejected base claim. The Examiner states that these claims would be allowable if rewritten in independent form. The Examiner states that Nishiyama does not teach or suggest the present Z group of claim 11 which has the R5 substituent.

In view of Applicants' response to the section 102(b) rejection of claims 1-10 and 13-14 based on Nishiyama et al, Applicants submit that claims 11 and 12 are allowable in their present form.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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